

Quadrature Phase Shift Interferometer with Unwrapping of Phase

ABSTRACT

A method and apparatus for interferometric measurement of a medium surface is disclosed. More particularly, a quadrature phase shift interferometer and a process for unwrapping phase are described. The interferometer has a reduced number of optical components though yields results sufficient to measure surface of a hard disc for final inspection. Defects on such a surface are characterized by their out-of-plane displacement with nanometer resolution.